

1 BEFORE THE STATE OF WASHINGTON
2 ENERGY FACILITY SITE EVALUATION COUNCIL
3

4 In the Matter of Application No. 2003-01:

EXHIBIT 25 SUP (MB-T SUP)

5 SAGEBRUSH POWER PARTNERS, LLC;

6 KITTITAS VALLEY WIND POWER PROJECT
7
8
9

10 **APPLICANT'S PREFILED DIRECT SUPPLEMENTAL TESTIMONY**
11 **WITNESS # 6: MARK BASTASCH**
12

13 Q Please state your name and business address.
14

15 A My name is Mark Bastasch and my business address is 2020 SW 4th Avenue, Portland, OR
16 97201.
17

18 Q Have you previously filed prepared testimony in this matter?
19

20 A Yes
21

22 Q Is this testimony given to supplement your prior testimony?
23

24 A Yes
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EXHIBIT 25 SUP (MB-T SUP) - 1
MARK BASTASCH
PREFILED SUPPLEMENTAL
TESTIMONY

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2 Q. What is the specific purpose of this supplement to your prior testimony?

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4 A My previous testimony provided a noise analysis for the Kittitas Valley Wind Power
5 project regarding a layout which was revised in late 2005. The project was downsized in
6 2005 and I provided a new noise analysis report regarding the revised layout. This report
7 was provided to Kittitas County in late 2005 as a part of a new land use application
8 submitted by Sagebrush Power Partners LLC. I also provided testimony to Kittitas
9 County as part of its hearing process.

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11 Q Would you please identify what has been marked for identification as Exhibit 25-2 (MB-2)

12 .
13 A Exhibit 25-2 (MB-2) the technical memorandum entitled "Revised Kittitas County Wind Power
14 Project Noise Summary Analysis Summary" referenced above, that I authored.

15
16 Q Would you please identify what has been marked for identification as Exhibit 25-3 (MB-3)

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18 A Exhibit 25-3 (MB-3) is a letter to the Kittitas Board of County Commissioners dated January 12,
19 2006. This letter provided clarification regarding an issue related to the distinction between
20 sound power level and sound pressure raised in the County hearing process.

21 Q Did you prepare these two exhibits and is the information contained therein within your
22 area of authority and /or expertise?

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24 A Yes

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EXHIBIT 25 SUP (MB-T SUP) - 2
MARK BASTACH
PREFILED SUPPLEMENTAL
TESTIMONY

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1 Q Do you incorporate the facts and content of these exhibits as part of your testimony?

2
3 A Yes.

4
5 Q Please summarize the conclusions of your noise analysis regarding the new layout?

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7 A A noise model of the proposed project was developed using source input noise levels from wind
8 turbine manufacturers' data. The sound power level used as input to the noise model for each
9 wind turbine was based on the G90 – 2 MW turbine by Gamesa Eolica. Information was
10 provided by Gamesa Eolica on sound power level vs wind speed for wind speeds from 3 meters
11 per second (6.7 miles per hour) to 21 m/s (47 mph). The maximum sound power level listed was
12 105.3 dBA. This sound power level was used in the modeling. A wind turbine hub height of 67
13 meters was used for all turbines.

14 Based on the modeling effort, the maximum predicted project noise level at any of the receptors
15 is 49 dBA. The Washington Department of Ecology has established limits for environmental
16 noise in Washington Administrative Code (WAC) 173-60-040. The limit at residential receptors
17 (environmental designation for noise abatement, or EDNA, Class A) for noise generated by
18 from an industrial facility (EDNA C) is 60 dBA during the daytime and 50 dBA during the
19 nighttime. The estimated maximum project noise level at a Class A receptor of 49 dBA
20 complies with the WAC limits.

21 Regulatory thresholds might be exceeded if the sound power level for the turbine ultimately
22 selected for construction is greater than the modeled scenario. Therefore, if the turbine selected
23 has a sound power level greater than 105.3 dBA used for the modeling, noise levels might
24 exceed the regulatory threshold. Nevertheless, the project is required to comply with the most
25 stringent state noise regulations, Class A EDNA with nighttime levels not to exceed 50 dBA.

1 An acoustical analysis of the final turbine layout will be prepared prior to construction, using
2 noise level data for the final turbine type selected to ensure compliance with the state
3 requirement (WAC 173-60).
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